California Environmental Protection Agency

Air Resources Board

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GUIDELINES FOR VISIBLE EMISSION EVALUATION PERSONNEL

CERTIFICATION/RECERTIFICATION

The following guidelines are provided to clarify the needs of the host Air District and the California Air Resources Board (CARB) training staff, as well as creating a training environment that provides all participants equal opportunity to certify/recertify in Visible Emission Evaluation (VEE).

Note: The audience that participates in VEE certification/recertification may include local and regional Air District inspectors and engineers, as well as personnel from the private regulated industry. It is important that a professional demeanor is demonstrated by both participants and training staff, to insure a valid test process and test results. Talking during the testing process or looking at another's answer sheet may result in your being disqualified and your test scores not being graded. Additionally, proctors or observers from the Air Resources Board and participating Air Districts may be present during the certification/recertification process to monitor all participants.

Recommended Equipment for VEE Certification

- 1. Black ink pens with hard tips
- 2. Clipboard
- 3. Straight edge
- 4. Small flashlight (for night certification)

Pre-Certification Guidelines

- Legibly fill in the entire top portion of the scoring form before certification/recertification begins. Be sure to include use of sunglasses, weather conditions and direction and distance to stack.
- 2. The sun must be located within a 140-degree arc behind the observer's back. As the sun moves during the day you will also have to change your position to stay within the 140-degree arc.

Helpful Tips

- 1. Press hard when entering your score. The scoring form is in triplicate and all three pages must show your marks.
- 2. Use a straightedge to help stay on the proper line.
- 3. Circle one answer per line.

- 4. Draw a horizontal line (-) through an answer you wish to change, and circle (O) your new answer. Do not black out old answer.
- 5. After each set of 25 readings always turn in the bottom copy to CARB staff.
- 6. When CARB staff announces the correct answer draw a slash mark (/) through this answer even if you circled the correct answer.
- 7. Read the plume immediately after the sound of the horn. CARB staff will only hold this reading for about three (3) seconds unless the plume is rolling over.
- 8. Read plume at the very top (exit) of the stack.
- 9. Read the plume at a right angle to its direction. You may need to change positions to maintain proper orientation.
- 10. Yell "hold" if you need the CARB staff to hold a particular reading because it is not readable. The operator will not "hold" because the reader will not (refuses to) change positions when the smoke is coming directly toward or away from them. The operator will "hold" if reader(s) is/are changing positions. The CARB proctor has the last say on what is readable.
- 11. Look away from the plume between readings.

After CARB staff has announced the correct answers determine the deviation by counting the spaces between your marked answer and the correct one (each space = 1 point). Up to three (3) points is passing, four (4) or more points is a fail. Mark the point number in the right hand column and total the score. Mark total score at the bottom of sheet.

Multiply this total score by 0.2 to obtain your deviation. The maximum deviation allowed is 7.5.

PASS - 37 points or under for a set of 25 readings $(37 \times 0.2 = 7.4)$

FAIL – 38 points or more

When you pass two <u>consecutive</u> runs, either black-white or white-black, you must turn in your completed white top sheet to receive credit.

If you fail any run on a page, discard your paper and start over on the next run with a new form.

No smoking during certification runs.